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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,871	11/04/2003	Todd C. Warden	YOR920030558 (00280760AA)	5120
30743 7590 07/24/2008 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				
EXAMINER HAIDER, FAWAAD				
ART UNIT 3627		PAPER NUMBER		
MAIL DATE 07/24/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/699,871

**Applicant(s)**

WERDEN, TODD C.

**Examiner**

FAWAAD HAIDER

**Art Unit**

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 10-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 and 10-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. The term "appropriate" in claim 1 is a relative term which renders the claim indefinite. The term "appropriate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
2. Claim 1 recites the limitation "camera" in line 11. "Camera" should be replaced by "camera assembly." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-6 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz et al (6,243,447) in view of Rafii et al (6,614,422).

Re Claim 1: Swartz discloses a remote activator device carried by a sales associate and connected by a computer network installed in the retail store to a computer with installed back office application software for at least one of accounting and inventory (see col.6, lines 5-9, 20, Figure 3); a magnetic stripe reader for reading a

credit or debit card to complete transaction in the displayed POS application (see col.2, lines 24-25 and col.10, line 51); and a scanner used by the sales associate for scanning merchandise codes to enter purchases in the displayed POS application (see col.1, lines 34-35 and col.5, lines 23-27). However, Swartz does not disclose a positioning system and an integrated projector and camera assembly.

Meanwhile, Rafii discloses a positioning system which recognizes a signal from the remote activator device and determines where and how to find an appropriate blank surface near the sales associate's actual location (see Abstract, col.2, line 44, col.4, lines 60-61, col.8, line 66, Figure 1); and an integrated projector and camera assembly responsive to the positioning system and which rotates to a correct position and displays a POS application on a blank surface near the location of the sales associate, the camera detecting entries in the POS application by the sales associate as interactions with the displayed POS application (see col.2, lines 32-64, col.4, line 27, col.10, line 41, Figure 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Swartz's invention with Rafii's use of a positioning system and projector/camera assembly in order to "display an image of a keyboard, including an image of a keyboard showing user fingers, and/or alphanumeric text as such data is input by the user on the virtual input device (See Abstract)."

Re Claim 2: Swartz discloses wherein said remote activator device, said scanner and said magnetic stripe reader are each part of an integrated device carried by the sales associate (see Figure 10).

Re Claim 3: Swartz discloses wherein in the integrated device further includes a printer for printing a sales receipt (see col.2, line 1).

Re Claim 4: Swartz discloses wherein the signal from the remote activator is a wireless signal conforming to a standardized protocol (see col.6, lines 5-7 and lines 20-21).

Re Claim 5: Swartz does not disclose the following limitation. Rafii discloses wherein the positioning system uses a positioning algorithm to determine where and how to find a blank surface near the sales associate's actual location (see col.18, line 64). It would have been obvious to modify Swartz's invention with Rafii's disclosure of an algorithm in order to "recognize what virtual keys are being typed upon by a user of the present invention (see col.18, lines 64-65)."

Re Claim 6: Swartz does not disclose the following limitation. Rafii discloses wherein the remote activator device transmits location information to the positioning system for use in determining where and how to find a blank surface near the sales associate's actual location (see col.8, line 66). It would have been obvious to modify Swartz's invention with Rafii's disclosure of an algorithm in order to "recognize what virtual keys are being typed upon by a user of the present invention (see col.18, lines 64-65)."

Re Claim 11: Swartz discloses wherein said computer is a server (see Figure 1).

Re Claims 12-15: Swartz discloses wherein said computer is connected to a credit card processor, which is connected to at least one of an outside bank and an

outside credit institution, is made using a dial-up network and/or a VPN (see Figures 8 and 9).

Re Claims 16-17: Swartz discloses wherein the integrated device further comprises a keypad, which may be used for entering a PIN number (see Figures 8 and 9).

### ***Response to Arguments***

5. Applicant's arguments filed 4/10/2008 have been fully considered but they are not persuasive. The applicant's first argument is that Swartz is connected to the store through a cellular telephone network. The cell phone could be utilized as a remote activator device using technology such as Bluetooth. The applicant also argues that the following limitations are not disclosed in Rafii: "a positioning system which recognizes a signal from the remote activator device and determines where and how to find an appropriate blank surface near the sales associate's actual location," and "an integrated projector and camera assembly responsive to the positioning system and which rotates to a correct position and displays a POS application on a blank surface near the location of the sales associate, the camera detecting entries in the POS application by the sales associate as interactions with the displayed POS application." As one can see in Figure 1, it is easy to see a positioning system on a blank surface near the location of the user.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fawaad Haider whose telephone number is 571-272-7178. The examiner can normally be reached on Monday-Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Ryan Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627

/Fawaad Haider/  
Examiner  
Art Unit 3627

FIH